

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor (s) Freitag et al.

Docket No. HSJ9-2003-0070US1

Serial No. Not yet assigned

Art Unit Not yet assigned

Filing Date Not yet assigned

Examiner Not yet assigned

Title: SPIN VALVE SENSOR HAVING AN ANTIPARALLEL (AP) SELF-PINNED LAYER STRUCTURE COMPRISING COBALT FOR HIGH MAGNETOSTRICTION

MAIL STOP PATENT APPLICATION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

SIR:

INFORMATION DISCLOSURE STATEMENT


In accordance with 37 CFR 1.97(b), the enclosed Information Disclosure Statement, with attached reference(s), is submitted for consideration in the above-identified application.

A copy of each of the listed documents is enclosed.

NO FEE IS REQUIRED.

The Examiner is respectfully requested to make the listed documents of record in connection with the prosecution of the subject application.

Respectfully,

  
John J. Oskorep  
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Date: 30 Sept 2003

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Under the Paperwork Reduction Action of 1995, no persons are required to response to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets necessary)				<b>COMPLETE IF KNOWN</b>	
				Application Number	Not Yet Assigned
				Filing Date	Not Yet Assigned
				First Named Inventor	Freitag
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
SHEET	1	OF	1	Docket Number	HSJ9-2003-0070US1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (If known)			
		5,583,725		Coffey et al.	12-10-1996	
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FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>6</sup>	
		T. DIMOPOULOS et al., Enhanced robustness and tunnel magnetoresistance in artificial ferromagnet based tunnel junctions, Journal of Applied Physics, 1 May 2000, 4685-4687, 87-9		
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		M. SAITO et al., PtMn spin valve with synthetic ferromagnet free and pinned layers, Journal of Applied Physics, 1 May 2000, 6974-6976, 87-9		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.